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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/677,015	09/30/2003	Jerry E. Tysinger	5483-025	3228
25184	7590	04/16/2008		
WILLIAM J. MASON MACCORD MASON PLLC POST OFFICE BOX 1489 WRIGHTSVILLE BEACH, NC 28480			EXAMINER CARR, DEBORAH D	
			ART UNIT 1621	PAPER NUMBER
			MAIL DATE 04/16/2008	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/677,015

**Applicant(s)**

TYSINGER, JERRY E.

**Examiner**

DEBORAH D. CARR

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 January 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1, 4, 6, 7, 10-17 and 19-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 4, 6, 7, 10-17 and 19-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Response to Arguments*

1. Applicant's arguments, see pages 8-10, filed 17 January 2008, with respect to claims 5, 7, 10, 12, 14, 21-29 have been fully considered and are persuasive. The rejections under 35 USC § 112 of claims 5, 7, 10, 12, 14, 21-29 has been withdrawn.
2. The following rejections are deemed proper.

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 4, 11, 14 rejected under 35 U.S.C. 102(b) as being clearly anticipated by Wingard et al.

Wingard teaches a that it is conventionally known in the art to use a dual process of continuous mechanical pressing followed by continuous solvent extraction to remove oils from oil containing materials. It is taught that soybeans can be flaked, conditioned by heating, mechanically pressed with the resulting soybean meal solvent extracted to remove the remaining oil contained therein. As shown on page 484 (2<sup>nd</sup> paragraph, right col.) the residual cake contains fro 10% to 20% which then exposed to a solvent extraction process to remove the residual oil.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 4, 6-7, 10-30 rejected under 35 U.S.C. 103(a) as being obvious over Wingard in view of Seaman et al (US Pat. 5,225,230), Tysinger et al. (US Pat. 6,511,690), and Muniyappa et al.

The applied reference (Tysinger et al. (US Pat. 6,511,690)) has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the

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prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c).

This rejection might also be overcome by showing that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(l)(1) and § 706.02(l)(2).

Wingard teaches that it is conventionally known in the art to use a dual process of continuous mechanical pressing followed by continuous solvent extraction to remove oils from oil containing materials. It is taught that soybeans can be flaked, conditioned by heating, mechanically pressed with the resulting soybean meal solvent extracted to remove the remaining oil contained therein. As shown on page 484 (2<sup>nd</sup> paragraph, right col.) the residual cake contains from 10% to 20% which is then exposed to a solvent extraction process to remove the residual oil.

While disclosing broadly process parameters, Wingard is silent regarding specific ranges and various process steps such as: amount of oil mechanically extracted from the soybeans, the temperature the soybeans are heated to, extraction solvent used, transesterification of the soybean oil.

However it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Wingard process to obtain the instant process since the modifications are conventionally known processes.

As shown by US'230 the processing of soybean oil wherein soybeans are heated to a temperature of from 220°F to 260°F, mechanically pressed to remove the oil and then heating the oil at a temperature up to 500°F is conventionally known.

US'690 discloses in the background mechanically expelling oil from soybeans, caustic refining soybean oil to remove free fatty acids and extracting oil from soybeans using hexane is conventionally known. Also claimed is a method of extracting soybean oil wherein soybeans are heated to a temperature of from 300°F to 370°F while being mechanically pressed to remove the oil and then heating the oil at a temperature up to 500°F under a vacuum to remove free fatty acids from the oil via physical refining.

Muniyappa et al. discloses the conversion of plant oils such as soybean oil into biodiesel oil via transesterification.

The chemical processes supra have been consolidated result in an expected reaction. In a chemical process, all of the evidence must be considered on the subject matter as a whole from the viewpoint of one skilled in the art, in the determination of obviousness, and not simply to the patentability of the products in the process. The process is deemed obvious to one of ordinary skill in the art since it involves predictable and expected reactions.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Deborah D. Carr whose telephone number is (571)272-0637. The examiner can normally be reached on Monday-Friday 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yvonne Eyler can be reached on 571-272-0871. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Deborah D Carr/  
Primary Examiner  
Art Unit 1621

Ddc